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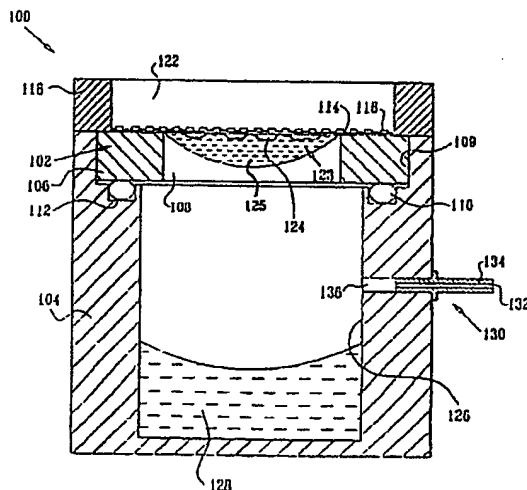
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(54) Title: LOW-PRESSURE CHAMBER FOR SCANNING ELECTRON MICROSCOPY IN A WET ENVIRONMENT



(57) **Abstract:** A specimen enclosure assembly (100) for use in an electron microscope and including a rigid specimen enclosure dish (102) having an aperture (122) and defining an enclosed specimen placement volume (125), an electron beam permeable, fluid impermeable, cover (114) sealing the specimen placement volume (125) at the aperture (122) from a volume outside the enclosure and a pressure controller communicating with the enclosed specimen placement volume (125) and being operative to maintain the enclosed specimen placement volume (125) at a pressure, which exceeds a vapor pressure of a liquid sample (123) in the specimen placement volume (125) and is greater than a pressure of a volume outside the enclosure, whereby a pressure differential across the cover (114) does not exceed a threshold level at which rupture of the cover (114) would occur

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